

DRAFT

INITIAL STUDY
MITIGATED NEGATIVE DECLARATION



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BODEGA HEAD NATURE TRAIL PROJECT

November 2006



State of California
DEPARTMENT OF PARKS AND RECREATION

MITIGATED NEGATIVE DECLARATION

PROJECT: BODEGA HEAD NATURE TRAIL PROJECT

LEAD AGENCY: California Department of Parks and Recreation

AVAILABILITY OF DOCUMENTS: The Initial Study for this Mitigated Negative Declaration is available for review at:

- Guerneville Public Library
Armstrong Woods Road
Guerneville, CA 95446
- California Department of Parks & Recreation
North Bay District Headquarters
25381 Steelhead Blvd.
Duncans Mills, CA 95430
- Department of Parks & Recreation
Northern Service Center
One Capital Mall-Suite 410
Sacramento, CA 95814
- CA Department of Parks & Recreation website
http://www.parks.ca.gov/default.asp?page_id=981

PROJECT DESCRIPTION:

The Department of Parks and Recreation proposes the development of an all access trail around Bodega Head within Sonoma Coast State Beach. This project will create an opportunity for people with limited mobility to explore and enjoy a panoramic view shed which includes views of the recently expanded Farallon Islands Ecological Reserve, Point Reyes National Seashore, Tomales Bay, Bodega Bay, Bodega Harbor, the historic site of the ill fated PG&E nuclear power plant, whale watching, birding and an excellent view of a large resident sea lion population at Seal Rock. The following is a summary of the planned improvements:

- Construction of 10,000 linear feet (L.F.) of new 4' wide trail. Full bench construction would be utilized where applicable. Where full bench construction is not possible, trail alignment will be turnpike construction. Trail will be surfaced with compacted $\frac{3}{4}$ " minus rock material.
- All gradients would conform to existing Regulatory Negotiation Committee accessibility guidelines.
- Decommission of 1076 L.F. of existing poorly aligned, worn and rutted formal and "volunteer" (unauthorized) trail. Reclaimed surfaces will be restored to natural contours.
- Construction of 5 interpretive stations, each with an information panel and a picnic table or bench.
- Construction of 2 puncheons (elevated crossings) over existing drainages. These will span the creek bed and channel.

A copy of the Initial Study is attached. Questions or comments regarding this Initial Study/Mitigated Negative Declaration may be addressed to:

Gary Shannon
California Department of Parks & Recreation
P.O. Box 123
Duncans Mills, CA 95430

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

Todd Thames
District Superintendent
California Department of Parks and Recreation
Russian River District

Date

Brendan O'Neil
Associate Environmental Scientist
Environmental Coordinator
California Department of Parks and Recreation
Russian River District

Date

Bodega Head Nature Trail
Sonoma Coast State Beach
California Department of Parks & Recreation

TABLE of CONTENTS

| <u>Chapter/Section</u> | <u>Page</u> |
|--|--------------------|
| 1 INTRODUCTION..... | 1 |
| 2 PROJECT DESCRIPTION..... | 5 |
| 3 ENVIRONMENTAL CHECKLIST..... | 11 |
| I. Aesthetics..... | 14 |
| II. Agricultural Resources..... | 15 |
| III. Air Quality..... | 16 |
| IV. Biological Resources..... | 18 |
| V. Cultural Resources..... | 25 |
| VI. Geology and Soils..... | 28 |
| VII. Hazards and Hazardous Materials..... | 31 |
| VIII. Hydrology and Water Quality..... | 34 |
| IX. Land Use and Planning..... | 36 |
| X. Mineral Resources..... | 37 |
| XI. Noise..... | 38 |
| XII. Population and Housing..... | 40 |
| XIII. Public Services..... | 41 |
| XIV. Recreation..... | 43 |
| XV. Transportation/Traffic..... | 44 |
| XVI. Utilities and Service Systems..... | 46 |
| 4 MANDATORY FINDINGS OF SIGNIFICANCE..... | 47 |
| 5 SUMMARY OF MITIGATION MEASURES..... | 49 |
| 6 REFERENCES..... | 53 |
| 7 REPORT PREPARATION..... | 55 |

Appendices

- A** MAPS, TABLES, AND CHARTS
- B** PROJECT DESIGN GRAPHICS
- C** CNDDDB RECORD SEARCH
- D** MITIGATION MONITORING AND REPORTING PROGRAM

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

The Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Bodega Head Nature Trail Project at Sonoma Coast State Beach, Sonoma County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq.*, and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq.*

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment [CEQA Guidelines §15063(a)]. If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the applicant mitigate the potentially significant effects to a less-than-significant level, a Mitigated Negative Declaration may be prepared instead of an EIR [CEQA Guidelines §15070(b)]. The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This IS/MND conforms to the content requirements under CEQA Guidelines §15071.

1.2 LEAD AGENCY

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is DPR. The contact person for the lead agency is:

Gary Shannon
District Landscape Architect
California Department of Parks and Recreation
Russian River District
P.O. Box 123
Duncans Mills, CA 95430
707-865-3132

All inquiries regarding environmental compliance for this project, including comments on this environmental document should be addressed to:

Brendan O'Neil
Associate Environmental Scientist
California Department of Parks and Recreation
Russian River District
P.O. Box 123
Duncans Mills, CA 95430
Fax: 707-865-2046

1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the proposed Bodega Head Nature Trail Project at Sonoma Coast State Beach. Mitigation measures have also been incorporated into the project to eliminate any potentially significant impacts or reduce them to a less-than-significant level.

This document is organized as follows:

Chapter 1 - Introduction

This chapter provides an introduction to the project and describes the purpose and organization of this document.

Chapter 2 - Project Description

This chapter describes the reasons for the project, scope of the project, and project objectives.

Chapter 3 - Environmental Setting, Impacts, and Mitigation Measures

This chapter identifies the significance of potential environmental impacts, explains the environmental setting for each environmental issue, and evaluates the potential impacts identified in the CEQA Environmental (Initial Study) Checklist. Mitigation measures are incorporated, where appropriate, to reduce potentially significant impacts to a less-than-significant level.

Chapter 4 - Mandatory Findings of Significance

This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impact to humans, as identified in the Initial Study.

Chapter 5 - Summary of Mitigation Measures

This chapter summarizes the mitigation measures incorporated into the project as a result of the Initial Study.

Chapter 6 - References.

This chapter identifies the references and sources used in the preparation of this IS/MND. It also provides a list of those involved in the preparation of this document.

Chapter 7 - Report Preparation

This chapter provides a list of those involved in the preparation of this document.

1.4 SUMMARY OF FINDINGS

Chapter 3 of this document contains the Environmental (Initial Study) Checklist that identifies the potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project.

Based on the IS and supporting environmental analysis provided in this document, the proposed Bodega Head Nature Trail Project would result in no impacts for the issues of agricultural resources, air quality, hydrology and water quality, land use and planning, mineral resources, population and housing, recreation and utilities and service systems. Less-than-significant impacts would occur for the issues of aesthetics and public services. Biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise and transportation/traffic impacts would be less-than-significant with mitigation.

In accordance with §15064(f) of the CEQA Guidelines, a MND shall be prepared if the proposed project will not have a significant effect on the environment after the inclusion of mitigation measures in the project. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that, after the incorporation of mitigation measures, the proposed project would have a significant effect on the environment. It is proposed that a Mitigated Negative Declaration be adopted in accordance with the CEQA Guidelines.

CHAPTER 2

PROJECT DESCRIPTION

2.1 INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Bodega Head Nature Trail Project at Sonoma Coast State Beach, located in Sonoma County, California. The proposed project would create an all access opportunity for visitors to experience a panoramic view of Bodega Bay and neighboring areas, observe wildlife and native plants, be educated and informed about natural and cultural history and ecological systems, and participate in healthful physical activity.

2.2 PROJECT LOCATION

Sonoma Coast State Beach is located along a 19 mile section of the Sonoma County Coast, ranging from Vista Point approximately 3 miles northwest of the town of Jenner along Highway 1 to the southern end of Bodega Head, the southwesternmost point of Bodega Harbor.

The proposed project would circle around most of the Bodega Head providing a 360 degree view shed of the surrounding areas including Bodega Bay, Bodega Harbor, Tomales Bay, Point Reyes, Farallon Island Ecological Reserve and Seal Rock.

2.3 BACKGROUND AND NEED FOR THE PROJECT

The Sonoma Coast State Beach lies in a sparsely developed area dotted with seasonal residences and resort communities. Due to its abundant natural resources, high scenic value, and mild weather throughout the year, the State Beach is one of the primary tourist attractions in the coastal area of Sonoma County. Tourism is one of the principal economic activities in the vicinity of the State Beach, as well as the County of Sonoma, which is famous for its wineries. Fort Ross State Historic Park and Salt Point State Park are located further north along the coast, and several others, including the Austin Creek State Recreation Area, are located further east (inland). Further south in Marin County are Tomales Bay State Park, Stinson Beach, and Point Reyes National Seashore. Most of these federal and State recreational areas are located on or near the roadways that provide access to the State Beach.

The purpose of this project is to increase the availability of recreational trails, scenic viewpoints, and educational/interpretive opportunities for all park users, including those with limited mobility, and to reduce soil erosion and drainage problems associated with the existing trail alignment. A portion of the current trails system consists of “volunteer” (unauthorized) trails created by visitors who desire access from parking lots or formal

trails to the visual features of the Bodega Headland area. These volunteer trails are often steep and are severely worn and rutted, causing erosion and drainage problems resulting in safety and long term maintenance concerns.

The proposed trail would be constructed using the DPR guidelines to prevent erosion, and provide access on properly constructed trails to additional vista areas. Interpretive stations shall be constructed at five locations, each with an information panel and a picnic table or bench, for the enjoyment and education of visitors. The trail surface would be compacted to form a firm and stable surface with 3/4" minus rock material and all gradients would conform to existing Regulatory Negotiation Committee accessibility guidelines resulting in an all access trail on the Sonoma Coast. Additionally, approximately 1076 L.F. of existing, problematic trail segments would be closed and restored to native habitat.

2.4 PROJECT OBJECTIVES

The Bodega Head Nature Trail Project is planned to meet the following objectives:

- Improve visitor access to visual features of the Bodega Headland.
- Provide an all access trail on the Sonoma Coast State Beach.
- Minimize damage to sensitive natural and cultural resources.
- Provide interpretive information on the Bodega Bay area and surrounding visual features.
- Reduce erosion, drainage problems, safety concerns and maintenance issues.

2.5 PROJECT DESCRIPTION

This project would entail the construction of 10,000 L.F. of new trail 4' wide. Full bench construction would be utilized where applicable. Where full bench construction is not possible, trail alignment will be raised on grade with native soils and/or rock surfacing. Trail will be surfaced with compacted with 3/4" minus rock material and treated with a soil stabilizer to form a firm and stable surface. All gradients would conform to existing Regulatory Negotiation Committee accessibility guidelines. The trail would be designed using approved and proven DPR guidelines to prevent erosion, drainage problems, safety concerns and long term maintenance problems.

To comply with current ADA standards, the trail surface will be treated with the soil stabilizing enzyme Perma-Zyme. Perma-Zyme is a non-toxic formulation of enzyme-rich materials manufactured through a natural fermentation process using sugars and other 100% natural, organic compounds. When mixed with water and applied during compaction, the enzymes act on the soil's organic fines through a catalytic bonding process which produces a strong, durable, water resistant surface. Perma-Zyme will be applied to the top 4 inches of the entire trail surface.

The project would close and restore 1076 L.F. of existing, problematic trail segments. These sections of trail would be restored to natural contours and revegetated via natural recruitment. Restoration of the natural contours of the abandoned trail alignment would entail ripping trail surface to a depth of approximately 2 inches.

To ensure that project objectives continue to be fulfilled, periodic maintenance will be performed. Maintenance activities will include tread work necessary to prevent resource degradation (including erosion), and maintain accessibility standards. Other maintenance measures (safety rail barriers and signing) may be necessary over time to keep visitors on the trail and out of high quality native habitats. Anticipated maintenance activities can be completed using hand tools without disruptions to visitors, wildlife, and plant life.

2.6 PROJECT IMPLEMENTATION

Construction will commence upon approval of all applicable permits. Puncture and interpretive display construction can take place anytime during the season. Windows for tread construction and rehabilitation would occur in the fall of 2006 through spring of 2007, during periods of adequate soil moisture.

Work will be performed by State Park trail crews. Work will be accomplished using hand tools, small motorized equipment and possibly a Sweco, a small motorized piece of equipment designed for trail construction, during appropriate seasons.

2.7 VISITATION TO SONOMA COAST STATE BEACH

The Sonoma Coast State Beach is one of California's most scenic areas. The picturesque coastline is composed of broad sandy beaches, secluded coves, rugged headlands and rocky bluffs. Experiencing the diverse native plant and wildlife communities is a compelling reason to visit the state beach. A variety of outdoor activities attract visitors including fishing, picnicking, camping, hiking, riding, surfing and wildlife watching. Cultural resources both modern and historic appeal to visitors as well.

Visitor attendance reports show the following numbers of people visiting Sonoma Coast State Beach:

| Table 2-1 Visitor Attendance at Sonoma Coast SB 2004 and 2005 | | |
|---|-------------|-----------|
| Visitor Type | Fiscal Year | |
| | 2004 | 2005 |
| Day Use | 2,518,312 | 3,061,485 |
| Camping | 94,446 | 83,178 |
| Total | 2,612,758 | 3,144,663 |
| Based on fiscal years (i.e., 2003-2004 fiscal year shown as 2004) | | |

2.8 CONSISTENCY WITH LOCAL PLANS AND POLICIES

The proposed Bodega Head Nature Trail Project is consistent with DPR's mission statement and the resource protection, management, and public recreation purposes established for Sonoma Coast State Beach. The County of Sonoma has adopted a Local Coastal Plan under regulations set forth by the California Coastal Commission. The proposed project is consistent with the Local Coastal Plan and with state coastal regulations regarding public access. This proposed project is consistent with proposals currently being considered in the Draft Sonoma Coast State Beach General Plan.

2.9 DISCRETIONARY APPROVALS

DPR has approval authority for the proposed Bodega Head Nature Trail at Sonoma Coast State Beach. The project may also require:

- Consultation and/or permits from the California Department of Fish and Game, including CEQA review for California sensitive species regulation compliance
- Coastal Development Permit from Sonoma County
- Regional Water Quality Control Board Section 401 permit
- Army Corps of Engineers Section 404 permit
- Compliance with Americans with Disabilities Act (ADA) requirements
- Public Resources Code 5024 review, and local Native American Heritage Commission review

2.10 RELATED PROJECTS

Sonoma Coast State Beach Gate and Sign Installation

This proposal seeks to install two vehicle gates and no-parking signs at two separate locations; one at Campbell Cove and one at North Salmon Creek Parking Lot of Sonoma Coast State Beach. These gates will close night time public access to Bodega Head and Salmon Creek Beach. The project is intended to reduce the number of crimes and resource damage in these locations, while enhancing visitor and officer safety, and increasing resource protection during the evening hours.

California Coastal Trail

The Department of Parks and Recreation is currently undergoing planning and improvements on various segments of the Coastal Trail from Salt Point to Sonoma Coast State Beach.

As part of the Coastal Trail Project, the Department is currently rehabilitating portions of the Kortum Trail (Kortum Trail Phase II). The scope of rehabilitation efforts were documented in a Mitigated Negative Declaration completed in November, 2005 (State Clearinghouse # 2001062029). The Kortum Trail Phase II Project is limited to an existing trail and will not have any bearing or impact relative to the Bodega Head Nature Trail Project.

Another sub-project of the California Coastal Trail is the Bodega Dunes Hiking and Biking Trail. This is a new project currently being proposed by the State Parks Department and Sonoma County Regional Parks Department. This planned trail project is a segment from Keef Ave. (near the community of Salmon Creek) at the park boundary to the park boundary near the Bodega Bay Community Center. This project involves both County and State Parks land. Grant funding is available for this project, and preparation of related environmental documents is expected to begin in the summer of 2006. This project is not connected to or related to the Bodega Head Nature Trail Project.

Bodega Bay Trails Plan

The Bodega Bay Trails Plan is a comprehensive trails plan that addresses pedestrian and bicycle circulation around the Bodega Bay area. This local area plan focuses on bicycle and hiking alternatives to the existing road network primarily the Highway One, north/south corridor. The scope of this plan does not extend to Bodega Head, nor do the proposed alternatives have connections to Bodega Head. Funding for implementation of plan elements has yet to be secured.

Carrington Ranch Immediate Public Use Facilities

A development plan is currently being prepared to address public use of the recently acquired 345 acre property east of the Salmon Creek area of Sonoma Coast State Beach. At the time of this writing, the property is owned by the Sonoma County Agricultural Preservation and Open Space District. The property is expected to be transferred to State Parks in the near future. The State Parks planning effort is directed at providing public facilities to make the property available for public use. Included in the planning is a proposed hiking trail between the north and south boundaries. Sometime in the future this trail segment may become part of the California Coastal Trail. Currently private property at either end of the Carrington Ranch prevents trail connections for the planned trail to be used as part of the California Coastal Trail. The facilities being planned for the Carrington Ranch are stand alone in nature and not intended to supplement other use areas along the coast. Planning is anticipated to be complete in late summer of 2006. At that time the appropriate environmental document will be prepared to assess potential impacts.

CHAPTER 3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title: Bodega Head Nature Trail
2. Lead Agency Name & Address: California Department of Parks and Recreation
3. Contact Person & Phone Number: Gary Shannon (707) 865-3132
4. Project Location: Sonoma Coast State Beach
5. Project Sponsor Name & Address: California Department of Parks and Recreation
Russian River District
P.O. Box 123
Duncans Mills, CA 95430
6. General Plan Designation: Institutional (Sonoma County General Plan)
7. Zoning: Institutional (Sonoma County General Plan)
8. Description of Project:

The Bodega Head Nature Trail Project proposes to create: 10,000 L.F. of 4' wide all access trail, close and restore of 3500 L.F. of existing trail, install 2 puncheons (elevated crossings), and install 5 interpretive stations containing an information panel and picnic table or bench.
9. Surrounding Land Uses & Setting: Refer to Chapter 3 of this document (Section IX, Land Use Planning)
10. Approval Required from Other Public Agencies: Refer to Chapter 2, Section 2.9

1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact", as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | <input checked="" type="checkbox"/> None |

DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment and a **NEGATIVE DECLARATION** will be prepared. ☐

I find that, although the original scope of the proposed project **COULD** have had a significant effect on the environment, there **WILL NOT** be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. A **MITIGATED NEGATIVE DECLARATION** will be prepared. ☒

I find that the proposed project **MAY** have a significant effect on the environment and an **ENVIRONMENTAL IMPACT REPORT** or its functional equivalent will be prepared. ☐

I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the impacts not sufficiently addressed in previous documents. ☐

I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required. ☐

Environmental Coordinator

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers, except "No Impact", that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact does not apply to the project being evaluated (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on general or project-specific factors (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must consider the whole of the project-related effects, both direct and indirect, including off-site, cumulative, construction, and operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether that impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate when there is sufficient evidence that a substantial or potentially substantial adverse change may occur in any of the physical conditions within the area affected by the project that cannot be mitigated below a level of significance. If there are one or more "Potentially Significant Impact" entries, an Environmental Impact Report (EIR) is required.
4. A "Mitigated Negative Declaration" (Negative Declaration: Less Than Significant with Mitigation Incorporated) applies where the incorporation of mitigation measures, prior to declaration of project approval, has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact with Mitigation." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR (including a General Plan) or Negative Declaration [CCR, Guidelines for the Implementation of CEQA, § 15063(c)(3)(D)]. References to an earlier analysis should:
 - a) Identify the earlier analysis and state where it is available for review.
 - b) Indicate which effects from the environmental checklist were adequately analyzed in the earlier document, pursuant to applicable legal standards, and whether these effects were adequately addressed by mitigation measures included in that analysis.
 - c) Describe the mitigation measures in this document that were incorporated or refined from the earlier document and indicate to what extent they address site-specific conditions for this project.
6. Lead agencies are encouraged to incorporate references to information sources for potential impacts into the checklist or appendix (e.g., general plans, zoning ordinances, biological assessments). Reference to a previously prepared or outside document should include an indication of the page or pages where the statement is substantiated.
7. A source list should be appended to this document. Sources used or individuals contacted should be listed in the source list and cited in the discussion.
8. Explanation(s) of each issue should identify:
 - a) the criteria or threshold, if any, used to evaluate the significance of the impact addressed by each question **and**
 - b) the mitigation measures, if any, prescribed to reduce the impact below the level of significance.

ENVIRONMENTAL ISSUES

I. AESTHETICS.

ENVIRONMENTAL SETTING

The proposed project site is situated on the coastal terrace of the Bodega Headlands of the Sonoma Coast State Beach. The view shed of the Bodega Headlands is panoramic with vistas of rugged coastal shoreline, scenic bays, wildlife observation and other visible coastal resources.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|--|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) - b) The projected trail will not degrade, damage or cause adverse effects on the existing visual resources. Composition of the proposed trail involves construction of new trail visually comparable to existing trails, reconstruction of existing official trails and decommissioning of "volunteer" trails resulting in little to no change established scenery. No damage shall be incurred to existing scenic features. This project will have no visual impacts on the surrounding areas.
- c) Due to grade requirements to meet accessibility guidelines, new trail alignments will bisect areas of the interior landscape on the head. Depending on the visitor's orientation, these proposed alignments will be visible on the landscape. Taking into account the surrounding visual resources, these trails will be subordinate to the overall visual character of the area.
- d) The project will not add any lighting or reflective surfaces that could increase glare or interfere with day or nighttime views. No impact.

II. AGRICULTURAL RESOURCES.

ENVIRONMENTAL SETTING

The project is located on the Bodega Head, on public land that is managed by the California Department of Parks and Recreation for the purpose of natural and cultural resource protection, recreation, and public education. The Department does not lease any of the lands within the project area for agricultural purposes. There is no agricultural usage in the lands surrounding the project site.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|--|---|--|---|-------------------------------------|
| WOULD THE PROJECT*: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

* In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model for use in assessing impacts on agricultural and farmland.

DISCUSSION

- a) No Prime Farmland, Unique Farmland or Farmland of Statewide Importance will be converted to non-agricultural use.
- b) No conflicts with existing zoning for agricultural use or a Williamson Act contract will occur as a result of the proposed work.
- c) Farmland will not be converted to non-agricultural use as a result of procedures necessary to implement this project.

III. AIR QUALITY.

ENVIRONMENTAL SETTING

Bodega Head is located in the North Coast Air Basin (NCAB), which comprises Del Norte, Humboldt, Trinity, Mendocino and northern Sonoma Counties, under jurisdiction of the Northern Sonoma County Air Pollution Control District (NSCAPCD) and United States Environmental Protection Agency (USEPA) Region IX.

According to the collected data, the relative air quality of NCAB is excellent, meeting all classified state and federal standards within a three-year period with the exception of Suspended Particulate Matter (PM10). PM10 consists of particles that are less than 10 microns in diameter - about 1/7th the thickness of a human hair, often smoke and dust particles.

The following air quality table was compiled using information provided by the California Air Resources Board.

| Pollutant | 2004 State Levels | 2004 National Levels |
|-------------------------------|-------------------|---------------------------|
| Ozone | Attainment | Unclassified / Attainment |
| Suspended Particulates (PM10) | Non-Attainment | Unclassified |
| Fine Particulates (PM2.5) | Unclassified | Unclassified / Attainment |
| Carbon Monoxide | Unclassified | Unclassified / Attainment |
| Nitrogen Dioxide | Attainment | Unclassified / Attainment |
| Sulfur Dioxide | Attainment | Unclassified |
| Sulfates | Attainment | Not Applicable (NA) |
| Lead (particulate) | Attainment | NA |
| Hydrogen Sulfate | Unclassified | NA |
| Visibility reducing particles | Unclassified | NA |

| WOULD THE PROJECT*: | POTENTIALLY SIGNIFICANT IMPACT | LESS THAN SIGNIFICANT WITH MITIGATION | LESS THAN SIGNIFICANT IMPACT | NO IMPACT |
|--|--------------------------------------|--|------------------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan or regulation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations (e.g., children, the elderly, individuals with compromised respiratory or immune systems)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Create objectionable odors affecting a substantial | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

number of people?

- * Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make these determinations.

DISCUSSION

- a) – e) The proposed project would not conflict with or obstruct implementation of any applicable air quality management plan for Sonoma County or NSCAPCD. Construction activities would not emit air contaminants at a level that, by themselves, violate any local, state or federal ambient air quality standards (AAQS), or contribute to a long-term or permanent increase in any air contaminant. No burning is proposed as part of the project. No objectionable odors will be created in the implementation of this project. The project will not result in any impacts to air quality. No impact.

IV. BIOLOGICAL RESOURCES.

ENVIRONMENTAL SETTING

This section describes the natural environmental setting along the Sonoma Coast that is known to occur, or may potentially occur, within the vicinity of the proposed project. Specific information is given on the common and special status vegetation communities, plants, and animals that may be affected by various elements of the project.

EXISTING SITE CONDITIONS

Methods

BOTANICAL SURVEYS

State Park staff conducted on-site botanical surveys during the months of April, May, June, and July 2006. The survey methodology involved walking the entire length of trail multiple times during the bloom season, identifying and recording observed species consistent with California Native Plant Society (CNPS) guidelines. All available biological references that related to the Sonoma County Coastal Region were reviewed, including the California Department of Fish and Game Natural Diversity Database (CNDDDB) and the Bodega Marine Laboratory's list of Vascular Plants of Bodega Head & Bodega Dunes. Additionally, State Park staff consulted both on-site and in subsequent communications with Bodega Marine Laboratory Reserve Manager Claudia Luke and former Reserve Manager Peter Connors. Surveys focused on observing and recording Special Status species on the proposed trail alignment and three feet on either side of the alignment.

WILDLIFE SURVEYS

Wildlife surveys consisted of field visits along all sections of trail between April and July 2006, and general recorded observations by park natural resource staff during all other visits. During the focused field visits, trail areas were examined for habitat suitability for State and Federally listed species and Species of Special Concern. Proposed trail alignment was walked multiple times. All available biological references relating to the Sonoma County Region were reviewed, including the CNDDDB, CA Dept of Fish and Game's Habitat Conservation Planning Branch's Special Plant and Animal Lists, the Bodega Marine Laboratory's list of Mammals, and the Sonoma County Breeding Bird Atlas (Betty Burridge, editor 1995).

SPECIAL STATUS SPECIES AND COMMUNITIES

Special Status species and communities are those that have been afforded special recognition and protection under state and federal regulations. These include species and habitats contained within the CNDDDB. A search of the CNDDDB for the Bodega Head 7.5 minute quadrangle was conducted for sensitive species and habitats documented as occurring within the project area.

Other references consulted include the California Native Plant Society Online Inventory of Rare and Endangered Plants (7th edition, v7-06, accessed 7/11/2006), and the California Department of Fish and Game's Habitat Conservation Planning Branch's Special Plant and Animal Lists (online lists). The CNDDDB records search and the CNPS Online Inventory Search, are provided in Appendix C. The results of the search are summarized in Table 1.

Special status species are defined as those plants and animals that are listed by federal, state, or local resource conservation agencies and organizations, including the California Native Plant Society. Specifically, this includes plants and animals that are officially listed as Threatened (FT) or Endangered (FE) or considered candidates for listing by the United States Fish and Wildlife Service, plants and animals officially listed as Rare (CR), Threatened (CT) or Endangered (CE) or Species of Special Concern (CSC) by the California Department of Fish and Game, or species recognized by the California Native Plant Society as list 1b, 2, 3, or 4.

| Table 1 | | |
|---|-------------------------------|----------------|
| SPECIES- Scientific Name | SPECIES- Common Name | LISTING |
| Birds | Birds | Birds |
| <i>Athene cunicularia</i> | Burrowing Owl | CSC |
| <i>Circus cyaneus</i> | Northern Harrier (Marsh Hawk) | CSC |
| <i>Falco peregrinus anatum</i> | American Peregrine Falcon | SE |
| <i>Pandion haliaetus</i> | Osprey | CSC |
| | | |
| Plants | Plants | Plants |
| <i>Abronia umbellata</i> ssp. <i>breviflora</i> | pink sand-verbena | 1B.1 |
| <i>Agrostis blasdalei</i> | Blasdale's bent grass | 1B.2 |
| <i>Allium peninsulare</i> var. <i>franciscanum</i> | Franciscan onion | 1B.2 |
| <i>Amphora californica</i> var. <i>napensis</i> | Napa false indigo | 1B.2 |
| <i>Calystegia purpurata</i> ssp. <i>saxicola</i> | coastal beach morning-glory | 1B.2 |
| <i>Campanula californica</i> | swamp harebell | 1B.2 |
| <i>Carex comosa</i> | bristly sedge | 2.1 |
| <i>Chorizanthe cuspidata</i> var. <i>cuspidata</i> | San Francisco Bay spineflower | 1B.2 |
| <i>Chorizanthe cuspidata</i> var. <i>villosa</i> | woolly-headed spineflower | 1B.2 |
| <i>Cirsium andrewsii</i> | Franciscan thistle | 1B.2 |
| <i>Cordylanthus maritimus</i> ssp. <i>palustris</i> | Pt. Reyes bird's-beak | 1B.2 |
| <i>Delphinium luteum</i> | yellow larkspur | 1B.1 |
| <i>Dirca occidentalis</i> | western leatherwood | 1B.2 |
| <i>Gilia capitata</i> ssp. <i>chamissonis</i> | dune gilia | 1B.1 |
| <i>Gilia capitata</i> ssp. <i>tomentosa</i> | wooly-headed gilia | 1B.1 |
| <i>Gilia millefoliata</i> | dark-eyed gilia | 1B.2 |
| <i>Horkelia marinensis</i> | Pt. Reyes horkelia | 1B.2 |
| <i>Lasthenia macrantha</i> ssp. <i>macrantha</i> | perennial goldfields | 1B.2 |
| <i>Lasthenia macrantha</i> ssp. <i>bakeri</i> | Baker's goldfields | 1B.2 |
| <i>Lupinus eximius</i> | San Mateo tree lupine | 3.2 |
| <i>Lupinus tidestromii</i> | Tidestrom's lupine | 1B.2 |
| <i>Monardella villosa</i> ssp. <i>globosa</i> | robust monardella | 1B.2 |
| <i>Polygonum marinense</i> | Marin knotweed | 3.1 |
| <i>Sidalcea hickmanii</i> ssp. <i>viridis</i> | Marin checkerbloom | 1B.3 |
| <i>Sidalcea malviflora</i> ssp. <i>purpurea</i> | purple-stemmed checkerbloom | 1B.2 |
| <i>Triquetrella californica</i> | coastal triquetrella | 1B.2 |

WETLAND DELINEATION

The U. S. Army Corps of Engineers defines wetlands as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” The U. S. Army Corps of Engineers (COE) wetland definition is made according to three criteria: vegetation, soils, and hydrology. Wetlands were surveyed as described in the U. S. Army Corps of Engineers Wetlands Delineation Manual (1987).

All of the proposed trail project areas are within the coastal zone and are under the jurisdiction of the County of Sonoma’s Local Coastal Plan. Under PRC Section 30121 in the Coastal Act, “Wetland” means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens”. The Coastal Act defines wetlands by the presence of any one of three wetland criteria (vegetation, soils, and hydrology). Therefore, wetlands within the coastal zone often encompass a much broader area under the Coastal Act than compared with wetlands as defined by the COE.

The project area was assessed for wetlands between April and July of 2006. This consisted of walking the proposed trail alignment, noting wetland indicator plant species. When more than 50% of the dominant species contained a combination of obligate or facultative wetland species, then that plant community was determined to have dominant wetland vegetation. For these sites, soil samples and hydrology were analyzed.

Results

SPECIAL STATUS PLANTS

Through literature searches, including the CNDDDB, twenty-six Special Status plants were identified as occurring or potentially occurring within the Bodega Head Quadrangle. These species, including their current listing, are presented in Table 1. The CNDDDB and CNPS Inventory search results are available, along with species lists from the Bodega Marine Reserve, in Appendix C. Six of the species on this list occur primarily in dune habitat and are not present on Bodega Head. Nine species returned by CNDDDB and CNPS Inventory searches are possibly found within the Bodega Head Quadrangle, but are not located in the habitat types found on Bodega Head itself. The remaining eleven species potentially occur in coastal prairie or scrub habitat, but were not found in the project area during site surveys.

OTHER PLANTS SPECIES, INCLUDING NON-NATIVES

The area of proposed trail from the northwestern parking lot, through the center of the Head, to the opposite eastern blufftop is composed primarily of healthy populations of native coastal prairie plant species such as *Bromus carinatus* var. *maritimus*, *Iris douglasii*, *Erigeron glaucus*, *Platystemon californicus*, *Amsinckia spectabilis*, *Eschscholzia californica*, *Armeria maritima*, *Ranunculus californicus*, *Hordeum brachyantherum*, and *Poa unilateralis*.

Along the eastern portions of the trail corridor, non-native invasive plant species are dominant. The most invasive species in the project area include the following: *Brassica rapa*, *Carpobrotus edulis*, and *Raphanus sativus*.

There is a healthy population of native swamp thistle, *Cirsium douglasii*, just southeast of the eastern parking lot. The trail alignment will avoid this population, thereby avoiding impacts.

SPECIAL STATUS WILDLIFE

Nesting and foraging habitat for the northern harrier (*Circus cyaneus*) is found throughout the open headlands of Sonoma Coast State Beach. Nesting occurs on or near the ground in open grassy meadows, marshes, agricultural fields, and savannahs. The birds hunt small prey, often rodents, by sight and sound while using low coursing flights through foraging areas. Shrubs are often used as perches within the habitat areas. The Sonoma County Breeding Bird Atlas (Burridge, editor 1995) indicates that harriers nest on Bodega Head, although no nesting pairs were encountered during State Parks Staff field visits between mid-April and late June 2006. Nearly all of the proposed trail areas traverse through both nesting and foraging habitat for the northern harrier.

Ospreys (*Pandion haliaetus*) nest in large trees or snags, rocky outcrops or human-made nesting platforms near large bodies of water. The birds feed primarily on fish. They hunt by diving down feet first and grasping their prey near the water's surface. Several sightings of the birds in flight and foraging were made between mid-April and late June, 2006. Most of these were observations of hunting over the Pacific Ocean. Very few tall trees or other suitable nesting platforms occur along Bodega Head.

The peregrine falcon (*Falco peregrinus anatum*) is a very uncommon breeding resident, and uncommon migrant along the Sonoma Coast. Active nesting sites are known to occur along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. Migrants occur along the California coast, and in the western Sierra Nevada in spring and fall. This species breeds mostly in woodland, forest, and coastal habitats on rocky cliff faces and outcroppings. No verified peregrine nesting sites are known to currently occur within or near the project area and none were observed during field visits between mid-April and late June 2006.

Burrowing owls (*Athene cunicularia*) are winter residents on Bodega Head. The Sonoma County Breeding Bird Atlas (Burridge, editor 1995) and the Bodega Marine Reserve's "Birds of Bodega Harbor, Bodega Head, and Bodega Dunes" list indicate that burrowing owls do not nest on Bodega Head.

NATURAL COMMUNITIES, INCLUDING SENSITIVE COMMUNITIES

The proposed project area consists of coastal blufftop habitat, coastal grassland prairie, and coastal scrub. Grassland composition varies from areas with a diverse native flora to patches of weedy invasive species. The vegetation along the route includes coastal scrub dominated by a high percentage of exotic species, and coastal terrace prairie dominated by a high percentage of native species. Of these general habitat types, sensitive natural communities that are recognized by the California Department of Fish and Game are certain elements of coastal prairie including *Danthonia californica*, *Deschampsia caespitosa*, and *Calamagrostis nutkaensis* associations. This type of coastal prairie is not present on Bodega Head. The coastal prairie on the Head is dominated by *Bromus carinatus* var. *maritimus*, *Iris douglasii*, *Erigeron glaucus*, *Platystemon californicus*, *Amsinckia spectabilis*, *Eschscholzia californica*, *Armeria maritima*, *Ranunculus californicus*, *Hordeum brachyantherum*, and *Poa unilateralis*.

WETLANDS

Only one area was determined to contain a dominance of wetland vegetation, with the other areas containing a dominance of upland indicator species. It is less than five acres in size and located on the south side of the road directly east of the main parking lot. It is separated from the proposed trail by the access road to the north and by topography to the south. The proposed trail alignment avoids this area therefore no impacts are expected.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|---|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a sensitive, candidate, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands, as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

a) Special Status Wildlife:

Osprey nesting success and foraging activity will not be reduced by trail construction or a

possible increase in visitor use throughout the project area. Suitable nesting and feeding habitats are absent from the project area.

For the northern harrier, trail construction activities could temporarily disrupt adjacent nesting locations and nesting success. Increased visitor use in the following years could potentially cause permanent disturbance to harriers during the early spring when incubation of eggs and feeding of flightless young occur. Along areas of the trail that are already in use, this disturbance is not considered to be significant. New trail construction through currently undisturbed habitat may displace nesting harriers if existing nest sites are near the new sections of trail, although nest desertion is difficult to predict. Impacts within new trail areas may be significant due to construction activities and if heavily used by the public. Mitigations are proposed below to reduce impacts to levels of less than significant.

The proposed trail alignment travels primarily through coastal prairie, scrub, and bluffs, thereby avoiding any potential peregrine falcon nesting sites on rocky outcrops. This project would not have an adverse impact on peregrine falcons.

| |
|---------------------------------|
| MITIGATION MEASURE BIO-1 |
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| <ul style="list-style-type: none">▪ To lessen the potential for nest disturbance of northern harriers, prior to construction, a qualified State Park ecologist shall instruct the work crews on how to identify harriers and their nesting behavior. If nesting behavior is observed during any construction activity, the crews shall immediately stop work in the area of disturbance and notify a Senior or Associate State Park Environmental Scientist. |
|--|

b) Sensitive Natural Communities:

No riparian areas or other recognized sensitive natural communities are present in the proposed project area. No impact. However, the following mitigation measure is proposed to avoid impacts to high quality coastal prairie and healthy populations of native thistle.

| |
|---------------------------------|
| MITIGATION MEASURE BIO-2 |
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|---|
| <ul style="list-style-type: none">▪ Avoid impacts to high quality coastal prairie community by adjusting trail alignments to pass through areas with a high density of exotic species (<i>Brassica rapa</i>, <i>Raphanus sativus</i>) to the greatest extent possible, rather than through an area with high density of native species (<i>Iris douglasii</i>, <i>Bromus carinatus</i>, <i>Erigeron glaucus</i>).▪ Avoid impacts to native swamp thistle (<i>Cirsium douglasii</i>) population at northeastern end of proposed new trail alignment by placing the trail alignment to pass through areas with high density of exotic species (<i>Brassica rapa</i>, <i>Raphanus sativus</i>). |
|---|

c) Only one area was determined to contain a dominance of wetland vegetation, with the other areas containing a dominance of upland indicator species. It is less than five acres in size and located on the south side of the road directly east of the main parking lot. It is separated from the proposed trail by the access road to the north and by topography to the south. The proposed trail alignment avoids this area therefore no impacts are expected.

d) The project site does not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. No impact will result.

e) California State Parks, Department Operations Manual, Section 0310.7 provides guidance for the management of exotic, invasive plant species and states in part:

Controlling damaging exotic plant species is one of the Department's greatest challenges in fulfilling its mission to help preserve the natural resource values of the State Park System. Invasive exotic (non-native) plants pose a serious threat to native ecosystems. These species can spread rapidly and out-compete California's native species, simultaneously changing the landscape, destroying habitat for other native species, and upsetting natural ecosystem processes.

Goals of management of invasive exotic plants in the State Park System are to:

- Protect and restore the biological diversity of California State Park ecosystems
 - Reduce the costs of resource maintenance.
- Trail construction and the associated disturbance of soils within the trail prism has the potential to spread invasive exotic plant species. Seeds and plant parts may be spread by the movement of soil and plant parts during construction and by maintenance activities. This is especially critical when using imported materials. In order to reduce the potential for the spread of invasive, exotic plant species, the following measures will be incorporated into the project: 1) Minimize soil excavation, erosion, and soil migration both off and on-site during and after trail construction. 2) Monitor for the establishment of new populations of invasive plant species for a three year period. Monitoring will consist of semiannual inspections. Any new invasive, exotic species populations identified within the project area shall be removed or controlled by methods deemed appropriate by the District Environmental Scientist. Any necessary application of herbicide will be consistent with approved DPR products, procedures, and protocols.

| |
|--|
| MITIGATION MEASURE BIO-3 |
| <ul style="list-style-type: none">▪ Minimize soil excavation, erosion, and soil migration both off and on-site during and after trail construction.▪ Monitor for the establishment of new populations of invasive plant species for a three year period. Monitoring will consist of semiannual inspections. Any new invasive, exotic species populations identified within the project area shall be removed or controlled by methods deemed appropriate by the District Environmental Scientist. |

f) There are no conservation plans, policies, or ordinances that apply to the proposed project or project area; therefore, the project has no impact to this area.

V. CULTURAL RESOURCES.

ENVIRONMENTAL SETTING

The dominant native groups in this area were the Pomo and Coast Miwok, whose presence dates back about 3000 years. Pomo territory once encompassed much of today's Mendocino, Lake and Sonoma counties. Farther south, the Coast Miwok occupied part of Sonoma County and what is now Marin County. These groups built seasonal villages of redwood bark houses along rivers and streams near what is now Bodega Bay. For food the native people hunted large and small game, caught fish and shellfish, and gathered acorns and various seeds. Both groups were accomplished basket makers.

Russian fur trappers arrived in the area in the early 1800s from Alaska. Along with hunting sea mammals they established a small agricultural community, growing fruits, grains and livestock for settlements in Alaska.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|--|---|--|---|--------------------------|
| WOULD THE PROJECT: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to §15064.5? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

DISCUSSION

- a) With the proximity of documented sites outside the project area, ground-disturbing activities could inadvertently expose and impact previously unrecorded prehistoric or historic

resources. Implementation of Mitigation Measure CULT-1 below would reduce any potential impacts to a less than significant level.

- a) Bodega Bay is listed on the National Register of Historic Places (added 1973- District-#73000461). No impacts to historical resources are anticipated, however in the event that historical resources are encountered during project construction, implementation of Mitigation Measure CULT-1 below would reduce the impact to a less than significant level.

| |
|---|
| MITIGATION MEASURE CULT-1 |
| <ul style="list-style-type: none">▪ In the event that previously undocumented cultural resources are encountered during the project construction (including but not limited to dark soil containing shellfish, bone, flaked stone, ground stone, or deposits of historic trash), work in the immediate vicinity of the find would be temporarily halted or diverted until a DPR-qualified cultural resource specialist has evaluated the find and implemented appropriate treatment and disposition of the artifact(s).▪ Once any significant cultural resources are found in a project location, a DPR-qualified historian and/or archaeologist (and Native American representative, if appropriate) would monitor any ground-disturbing work in that area from that point forward. |

- b) Although known archaeological sites are present in areas near the project site, no archaeological resources have been identified or are known to exist in the proposed project area. No impacts to archaeological resources are anticipated, however in the event that archaeological resources are encountered during project construction, implementation of Mitigation Measure CULT-1 above would reduce the impact to a less than significant level.
- c) No human remains or burial sites have been documented or are known to exist at the proposed project site. No impact is anticipated, but if any potential human remains or burial artifacts are identified, implementation of Mitigation Measure CULT-2 below would reduce the impact to a less than significant level.

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|----------------------------------|
| MITIGATION MEASURE CULT-2 |
|----------------------------------|

- In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate DPR personnel. Any human remains and/or funerary objects will be left in place. The DPR Sector Superintendent (or authorized representative) will notify the County Coroner, in accordance with §7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (NAHC) will be notified within 24 hours of the discovery if the Coroner determines that the remains are Native American. The NAHC will designate the “Most Likely Descendent” (MLD) of the deceased Native American. The MLD will recommend an appropriate disposition of the remains. If a Native American monitor is on-site at the time of the discovery and that person has been designated the MLD by the NAHC, the monitor will make the recommendation of the appropriate disposition.

VI. GEOLOGY AND SOILS.

ENVIRONMENTAL SETTING

The geology of the Sonoma Coast State Beach consists of two plates divided by the San Andreas Fault, the nearest segment of which runs along the coastline except where it bisects Bodega Head. The San Andreas Fault and smaller parallel faults make up the approximately 1.5-miles-wide San Andreas Fault Zone, which marks the boundary between the North American Plate and the Pacific Plate. Strong earthquakes are created by friction and stress as the two plates grind past one another along the San Andreas Fault. These earthquakes include the devastating San Francisco Earthquake of 1906 and the Loma Prieta Earthquake of 1989. Due to these historic seismic disasters and the potential for more strong earthquakes in the future, the San Andreas Fault Zone is one of the best known earthquake-producing regions in the world. Surface fault rupture is a potential hazard in the San Andreas Fault Zone.

West of the fault on Bodega Head, the rocks are Cretaceous granites of the Salinia Terrane and overlying sand and gravel. Specifically, outcrops of Santa Lucia granodiorite, one of the oldest formations in the Coast Ranges, have weathered into the decomposed granite sand which forms much of Bodega Head. Granite originated by the cooling of molten igneous rock deep in the earth approximately 100 million years ago. Bodega Head was formed at least 345 miles to the south and was moved along the San Andreas Fault to the present location over the last 29 million years. It is the only part of the State Beach located on the Pacific Plate (Sonoma Coast State Beach General Plan and EIR. Draft, April 2006).

Erosion along the California coast is an ongoing concern. Coastal bluffs will continue to recede, with larger erosion events occurring during severe storms and due to seismic shaking during earthquakes.

There are no known paleontological resources or sites, or unique geologic features, located in the project area.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|--|---|--|---|--------------------------|
| WOULD THE PROJECT: | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area, or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable, as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste disposal systems, where sewers are not available for the disposal of waste water? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) The proposed project is a rehabilitation and expansion of an existing trail system, and should not expose visitors to an increased risk over existing conditions. The location is not known to be a liquefaction prone area and no landslides have been mapped within the project area. While the proposed project is in the immediate area of the San Andreas Fault Zone, no structures are proposed that would jeopardize public safety in the event of an earthquake. Less than significant impact.
- b) Existing trails in the project area are a concern for erosion along the coastal bluff. Areas of frequent visitation have great potential for erosion due to accelerated deterioration of trail surfaces. Additional potential for soil erosion exists during the construction phase. The mitigation measures described in GEO-1 would insure that potential impacts would be reduced to a less than significant level.

| |
|---------------------------------|
| MITIGATION MEASURE GEO-1 |
|---------------------------------|

- Trails shall be constructed such that rainfall runoff is not concentrated in one direction, resulting in potential erosion.
- During the construction process, temporary erosion control methods will be used to protect disturbed soils. These include, but are not limited to the following:
 - Erect silt fencing, as necessary, to prevent excavated soils from entering drainages and spilling down nearby bluffs.
 - Compact all fill materials to stabilize surfaces.
 - Cover exposed areas of earth with native mulch.
 - Any stockpiled soils shall be covered in the event of rainfall to prevent runoff.
- Rehabilitated sections of existing trails shall be restored to natural contours.
- California State Park trail construction supervisors will monitor trail surfaces for damage or deterioration. Department approved repair and maintenance standards will be employed to correct problems and adjust trail drainage patterns for optimum trail and resource protection.

- c) Although the soils around the project site are considered loosely consolidated, they are considered to be stable. Existing landslides are not present on the project site and the proposed project would not increase the potential for this activity. No impact.
- d) The presence or absence of expansive soils will not result in any risk of life or property as a result of work proposed by this project. No impact.
- e) This project does not include the installation of septic tanks or leach fields. No impact will result.
- f) The project site does not include any known paleontological resources or unique geologic features. No impact will result.

VII. HAZARDS AND HAZARDOUS MATERIALS.

ENVIRONMENTAL SETTING

The proposed project site is on a section of coastal terrace known as the Bodega Head, on the southern end of the Sonoma Coast State Beach. There has been no known land use in the project area (agricultural, industrial, building construction, etc.) that could have been a source for hazardous materials. There is no known hazardous contamination and the site is not suspected to contain any hazardous wastes, debris or soil contamination.

There are no schools located within one-quarter mile and no airports located within two miles of the project site.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|--|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials, substances, or waste into the environment? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites, compiled pursuant to Government Code §65962.5, and, as a result, create a significant hazard to the public or environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be located in the vicinity of a private airstrip? If so, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury, or death from wildland fires, including areas where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

DISCUSSION

a) – b) The existing trails will remain open to the public during construction. Construction activities would require the use of gas-powered equipment such as chain saws, drills, motorized wheel-barrows and weed whips. This equipment uses certain potentially hazardous materials, such as fuels, oils, or other fluids associated with the operation and maintenance of vehicles and equipment. These materials are generally contained within vessels engineered for safe storage. Large quantities of these materials will not be stored at or transported to the construction site. Spills, upsets, or other construction-related accidents could result in a release of fuel or other hazardous substances into the environment. The following mitigation would reduce the potential for adverse impacts from these incidents to a less than significant level.

| MITIGATION MEASURE HAZMAT-1 |
|--|
| <ul style="list-style-type: none">▪ All equipment will be inspected for leaks immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from the project site.▪ A designated staging area will be identified where equipment refueling may occur. A spill kit will be maintained on-site throughout the duration of the project.▪ Equipment will be cleaned and repaired (excepting emergency repairs) in the maintenance shop, away from the project site. Any contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries at a lawfully permitted or authorized destination.▪ When power equipment is being used in construction, the public will be temporarily routed away from the subject location. |

- c) There are no schools in the general vicinity of the project or within one-quarter mile of the proposed project site. Therefore, there will be no impact from this project
- d) No part of the project site is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5. No area within the project site is currently restricted or known to have hazardous materials present. Therefore, no impact would occur with project development.
- e) – f) The project area is not located within an airport land use plan, within two miles of a public airport, or in the vicinity of a private air strip. Therefore, no impact would occur as a result of this project.
- g) Most of the construction activities associated with the proposed project would not restrict access to, cause delays, or block any public road outside the immediate construction area. Therefore, the impact of this project would be less than significant.
- h) The project area contains amounts of grasses and shrubs that can become highly combustible during the dry season. The use of equipment for construction may be in close proximity to vegetation. Improper exhaust systems on equipment and friction between metal and rocks could generate sparks. Due to these uses, there is some risk of accidental

wildfire ignition. The following mitigation would reduce the potential for adverse impacts from this project to a less than significant level.

| MITIGATION MEASURE HAZMAT-2 |
|---|
| <ul style="list-style-type: none">▪ Spark arrestors will be required for all motorized equipment.▪ Construction crews will be required to park vehicles away from flammable material such as dry grasses and brush.▪ Park staff will be required to have a State Park radio on site, which allows direct contact to a centralized dispatch or Sonoma County Fire Department. Fire suppression equipment is available on park grounds. |

VIII. HYDROLOGY AND WATER QUALITY.

ENVIRONMENTAL SETTING

The project site is located on the coastal terrace, away from any major drainages. Surface water flows from precipitation and runoff during storm events drain into the Pacific Ocean. There are no groundwater recharge areas or FEMA-designated flood zones within the project area.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|---|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Substantially degrade water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, or other flood hazard delineation map? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Place structures that would impede or redirect flood flows within a 100-year flood hazard area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|--|---|--|---|-------------------------------------|
| i) Expose people or structures to a significant risk of loss, injury, or death from flooding, including flooding resulting from the failure of a levee or dam? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Result in inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) This project does not contain any elements related to waste water discharge. No impact.
- b) This project has no connection or relationship to groundwater supplies. No impact.
- c) A section of new trail construction crosses through 2 seasonal drainages. The 2 puncheons included in the proposed project will be constructed to span these seasonal drainages, remaining above the streambed and channel. There will be no change to the channels or flow patterns, therefore no impact.
- d) The project will improve the currently existing drainage patterns by eliminating artificially created concentrated runoff patterns. The project will not alter drainage courses. No impact.
- e) This project will not alter or change stormwater runoff patterns or contribute to additional amounts of runoff. No impact
- f) This project will not degrade water quality. No impact.
- g) – h) The proposed project site is not within the boundaries of a 100-year flood hazard area. The project would not be impacted by such an event nor would the project affect a change to the impact level of another area. No impact.
- i) This project would not expose people or structures to an increased significant risk of loss, injury, or death from flooding. No impact.
- j) No mudflows are expected to occur at the project site. No impact.

IX. LAND USE AND PLANNING.

ENVIRONMENTAL SETTING

The Sonoma County General Plan places Bodega Head in the Sonoma Coast/Gualala Basin planning area which runs the 40-mile length of the Pacific Coast margin from the Gualala River to the Estero Americano. In addition to several coastal communities, it extends inland to include Annapolis, Cazadero, Duncans Mills, Bodega, Freestone, Camp Meeker, and Occidental. Roughly paralleling The San Andreas Fault Zone, the rugged Sonoma Coast is a scenic area of regional, state, and national significance, with nearly vertical sea cliffs and sea stacks along the shoreline, dunes, marine terraces, coastal uplands, and headlands. In the north, the Gualala River South Fork extends inland into the coniferous forests of the western Mendocino Highlands. This planning area is also the most sparsely populated of the sub-county planning regions due to its relative remoteness and inaccessibility.

The project is consistent with the Sonoma Coast State Beach General Plan (draft, April 2006) and policies of Sonoma County Local Coastal Plan, which call for the provision of public coastal access, recreational trails, and interpretive/educational facilities within Sonoma Coast State Beach.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|---|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) The proposed project site is within the Sonoma Coast State Beach property. The project would add no barriers or elements that would divide or interfere with the established surrounding communities. No impact.
- b) – c) The project site is located within the Sonoma Coast State Beach and will be subject to land use restrictions contained in the Sonoma County Local Coastal Plan and proposed Sonoma Coast State Beach GP. Sonoma Coast State Beach is zoned 'Institutional' in the Sonoma county General Plan. No project elements are in conflict with the zoning, regulatory policies, land use plans, conservation plans or ordinances for this area. All appropriate consultation and permits will be acquired, in compliance with all applicable local, state, and federal requirements. No impact.

X. MINERAL RESOURCES.

ENVIRONMENTAL SETTING

No significant mineral resources have been identified within the boundaries of the project area at Bodega Head with the Sonoma Coast State Beach. Mineral resource extraction is not permitted under the Resource Management Directives of the Department of Parks and Recreation.

All construction activities associated with the project would take place within the boundaries of Sonoma Coast State Beach, Sonoma County.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|--|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Result in the loss of availability of a known mineral resource that is or would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) The project will not result in the loss of availability of known minerals: no known mineral resources exist within the project area. No impact.
- b) No loss shall result in the availability of locally important mineral resource recovery sites because none are know to exist within the project area.

XI. NOISE.

ENVIRONMENTAL SETTING

Bodega Head is located in the sparsely populated area around Bodega Harbor. No noise sensitive land uses are located in the immediate vicinity of the proposed construction. All construction activities will take place within the State Beach boundaries.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|---|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Generate or expose people to noise levels in excess of standards established in a local general plan or noise ordinance, or in other applicable local, state, or federal standards? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Generate or expose people to excessive groundborne vibrations or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Create a substantial permanent increase in ambient noise levels in the vicinity of the project (above levels without the project)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Create a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project, in excess of noise levels existing without the project? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport? If so, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be in the vicinity of a private airstrip? If so, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) Construction noise levels at or near the project area may exceed ambient noise levels when power tools are used and may be heard by visitors in the vicinity. However noise generated by construction would not exceed applicable noise standards. Less than significant impact.

Construction activity will not involve the use of explosives; pile driving, or other intensive construction techniques that could generate significant ground vibration or noise. Minor vibration immediately adjacent to excavating equipment would only be generated on a short-term basis. Therefore, groundborne vibration or noise generated by the project will have a less than significant impact.

- c) Nothing within the scope of the proposed project would result in a substantial permanent increase in ambient noise levels. Therefore, no impact.
- d) Construction noise levels at the project site will fluctuate depending on when motorized equipment is in use. Short term increase in ambient noise levels could result in a potential increase in annoyance to visitors in vicinity of the project. Implementation of the following mitigation measures would insure that those potential impacts are less than significant.

| |
|--|
| MITIGATION MEASURE NOISE-1 |
| <ul style="list-style-type: none">▪ Construction activities would be limited to daylight hours and a Monday through Friday work week.▪ Motorized equipment used on the project site would be equipped with a muffler of a type recommend by the manufacturer. |

- e) – f) This project is not located within an airport land use plan, within two miles of a public airport, or in the vicinity of a private airstrip. No impact.

XII. POPULATION AND HOUSING

ENVIRONMENTAL SETTING

The project area is located on a section of coastal terrace known as Bodega Head, southwest of the Bodega Harbor and the town of Bodega Bay. Bodega Head has not been developed for housing and the surrounding area is sparsely populated.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|---|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

a) – c) The project will not have a housing component and all work will take place within the confines of the park boundaries. No new public or private projects are anticipated to be initiated as a result of the proposed project. No houses will have to be moved or removed for the project. No persons shall be displaced either temporarily or permanently. No impact.

XIII. PUBLIC SERVICES.

ENVIRONMENTAL SETTING

State Park employees (State Park Rangers and Lifeguards) provide primary law enforcement and emergency services within Sonoma Coast State Beach. Other agencies in the area that may also respond are Sonoma County Sheriff's Department, Monte Rio Volunteer Fire Department and CHP. If there are emergencies which involve transportation, REACH (a helicopter flight service), Sonoma County Sheriff helicopter and Coastal Ambulance Service are available to provide aid.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|--|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Fire protection? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) All park facilities would remain open during construction. The project would not interfere with any public services during construction or after completion. The project would not have a measurable increase in visitation therefore the level of required services is expected to remain the same. The proposed facility improvements should require less maintenance and therefore will not be an additional burden to park staff.
- a) Fire Protection: The project area contains amounts of grasses and shrubs that can become highly combustible during the dry season. The use of equipment for construction may be in close proximity to vegetation. Improper exhaust systems on equipment and friction between metal and rocks could generate sparks. Due to these uses, there is some risk of accidental wildfire ignition and therefore a possible need for increased fire protection in the event of a fire. It is not anticipated that any new governmental facilities or any alterations to existing government facilities will be necessary as a result of this project. Implementation of Mitigation Measure Haz-Mat-2 will reduce any possible impacts related to fire protection.

| |
|---|
| MITIGATION MEASURE HAZMAT-2 |
| <ul style="list-style-type: none">▪ Spark arrestors will be required for all motorized equipment.▪ Construction crews will be required to park vehicles away from flammable material such as dry grasses and brush.▪ Park staff will be required to have a State Park radio on site, which allows direct contact to a centralized dispatch or Sonoma County Fire Department. Fire suppression equipment is available on park grounds. |

XIV. RECREATION.

ENVIRONMENTAL SETTING

Sonoma Coast State Beach receives approximately 3,000,000 visitors annually. The State Beach provides visitors with a variety of recreation activities such as hiking, camping, picnicking, fishing and surfing. There are several accessible features within the State Beach. Most day-use activities are available free of charge.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|---|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) This project is a rehabilitation and improvement of an existing recreational facility, and as such should not result in a measurable increase of usage at nearby parks and recreation facilities. No impact.
- b) This project is a rehabilitation and improvement of the existing trail system. It will not require additional facilities or expansion of existing facilities. The proposed project will improve the recreation experience of park visitors while helping to prevent loss of natural resources by preventing and controlling erosion. No impact.

XV. TRANSPORTATION/TRAFFIC.

ENVIRONMENTAL SETTING

The proposed project site is located with the boundaries of Sonoma Coast State Beach, in the Sonoma Coast / Gualala Basin region. The region does not have an extensive highway network due to its remote location in the county and a relatively low population density. Traffic patterns in the region are affected primarily by recreational travel.

Bodega Head is accessed via Bay Flat Rd. from Highway 1 near the town of Bodega Bay. Traffic in and around the project area is limited to visitors engaging in day-use activities. The access road terminates at designated parking areas.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|--|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system (i.e., a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Cause a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that would substantially increase hazards? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Result in inadequate parking capacity? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) No measurable increase in traffic volume is anticipated due to the proposed project. No measurable increase in visitation is expected therefore the capacity and congestions of the existing roads will not change. No impact.

- b) No impact shall be incurred to the level of service standards established by CalTrans. Neither Highway 1 nor Bay Flat Rd. shall experience a measurable increase in traffic volume or congestion as a result of this project.
- c) The project area is not located within an airport land use plan, within two miles of a public airport, or in the vicinity of a private air strip. No impact would occur as a result of this project.
- d) The proposed trail addition intersects the park access road in one location. However, existing low speed limit signs on the access road (15 MPH), along with the addition of pedestrian crossing signs, will reduce the potential impact to a less than significant level.

| |
|-----------------------------------|
| MITIGATION MEASURE TRANS-1 |
|-----------------------------------|

| |
|---|
| The appropriate pedestrian crossing signs will be posted in accordance to the State Park Standards and guidelines set by CalTrans for the type of intersection in question. |
|---|

- e) All construction activities associated with the project would occur within the boundaries of Sonoma Coast State Beach and would not restrict access or block any public road. All areas within the project site would remain open to the public during construction. Minimum access requirements for emergency vehicles would be maintained at all times. No impact.
- f) Adequate parking exists to accommodate current and projected levels of visitation. Construction equipment and crew vehicles would utilize the existing parking area at the Bodega Head. No impact.
- g) There are no policies, plans or programs supporting alternative transportation that apply to this project. No impact.

XVI. UTILITIES AND SERVICE SYSTEMS.

ENVIRONMENTAL SETTING

Bodega Head is a section of coastal terrace located west of Bodega Bay. The proposed project area is mostly undeveloped with no utilities or service systems.

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|---|---|--|---|-------------------------------------|
| WOULD THE PROJECT: | | | | |
| a) Exceed wastewater treatment restrictions or standards of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Would the construction of these facilities cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Would the construction of these facilities cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in a determination, by the wastewater treatment provider that serves or may serve the project, that it has adequate capacity to service the project's anticipated demand, in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations as they relate to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

DISCUSSION

- a) – g) No new utilities and services will be required as a result of the proposed project. No impact to utilities and services will occur as a result of the proposed project.

CHAPTER 4

MANDATORY FINDINGS OF SIGNIFICANCE

| | <u>POTENTIALLY SIGNIFICANT IMPACT</u> | <u>LESS THAN SIGNIFICANT WITH MITIGATION</u> | <u>LESS THAN SIGNIFICANT IMPACT</u> | <u>NO IMPACT</u> |
|---|---|--|---|--------------------------|
| WOULD THE PROJECT: | | | | |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Have the potential to eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects, and probably future projects?) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Have environmental effects that will cause substantial adverse effects on humans, either directly or indirectly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

DISCUSSION

- a) The proposed project was evaluated for potential significant adverse impacts to the natural environmental and its animals and plant communities. It has been determined that the proposed project has the potential degrade the quality of the environment (soil erosion) and threaten to eliminate a plant community (coastal prairie). However, full implementation of all mitigation measures incorporated into this project would avoid or reduce these potential impacts to a less than significant level.
- b) The proposed project was evaluated for potential significant adverse impacts to the cultural resources of Sonoma Coast State Beach. It has been determined that the work proposed in this project would have the potential to cause a significant adverse impact to archaeological resources. However, full implementation of all mitigation measures incorporated into this project would reduce these impacts, both individually and cumulative, to a less than significant level.
- c) The potential impacts of this project, either individually or cumulatively, when combined with current and future projects, will not result in cumulatively considerable project. Please refer to Chapter 2; Section 10- Related Projects. Full implementation of all mitigation measures incorporated into this project would reduce all impacts to a less than significant level.

- d) Most project-related environmental effects have been determined to pose a less than significant impact on humans. However, possible impacts from hazardous materials, fire and noise, though temporary in nature, have the potential to result in significant adverse effects on humans. These potentially significant adverse impacts would be reduced to a less than significant level when all mitigation measures incorporated into this project are fully implemented.

CHAPTER 5

SUMMARY OF MITIGATION MEASURES

The following mitigation measures would be implemented by DPR as part of the Bodega Head Nature Trail Project.

AESTHETICS

- No mitigation measures are proposed because there will be no impacts to aesthetics resources as a result of the project.

AGRICULTURAL RESOURCES

- No mitigation measures are proposed because there will be no impacts to agricultural resources as a result of the project.

AIR QUALITY

- No mitigation measures are proposed because there will be no impacts to air quality as a result of the project.

BIOLOGICAL RESOURCES

MITIGATION MEASURES BIO-1

- To lessen the potential for nest disturbance of northern harriers, prior to construction, a qualified State Park ecologist shall instruct the work crews on how to identify harriers and their nesting behavior. If nesting behavior is observed during any construction activity, the crews shall immediately stop work in the area of disturbance and notify a Senior or Associate State Park Environmental Scientist.

MITIGATION MEASURES BIO-2

- Avoid impacts to high quality coastal prairie community by adjusting trail alignments to pass through areas with a high density of exotic species (*Brassica rapa*, *Raphanus sativus*) to the greatest extent possible, rather than through an area with high density of native species (*Iris douglasii*, *Bromus carinatus*, *Erigeron glaucaus*).
- Avoid impacts to native swamp thistle (*Cirsium douglasii*) population at north eastern end of proposed new trail alignment by placing the trail alignment to pass through areas with high density of exotic species (*Brassica rapa*, *Raphanus sativus*).

MITIGATION MEASURES BIO-3

- Minimize soil excavation, erosion, and soil migration both off and on-site during and after trail construction.
- Monitor for the establishment of new populations of invasive plant species for a three year period. Monitoring will consist of semiannual inspections. Any new invasive, exotic species populations identified within the project area shall be removed or controlled by methods deemed appropriate by the District Environmental Scientist.

CULTURAL RESOURCES

MITIGATION MEASURES CULT-1

- In the event that previously undocumented cultural resources are encountered during the project construction (including but not limited to dark soil containing shellfish, bone, flaked stone, ground stone, or deposits of historic trash), work in the immediate vicinity of the find would be temporarily halted or diverted until a DPR-qualified cultural resource specialist has evaluated the find and implement appropriate treatment and disposition of the artifact(s).
- Once any significant cultural resources are found in a project location, a DPR-qualified historian and/or archaeologist (and Native American representative, if appropriate) would monitor any ground-disturbing work in that area from that point forward.

MITIGATION MEASURES CULT-2

- In the event that human remains are discovered, work will cease immediately in the area of the find and the project manager/site supervisor will notify the appropriate DPR personnel. Any human remains and/or funerary objects will be left in place. The DPR Sector Superintendent (or authorized representative) will notify the County Coroner, in accordance with §7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (NAHC) will be notified within 24 hours of the discovery if the Coroner determines that the remains are Native American. The NAHC will designate the "Most Likely Descendent" (MLD) of the deceased Native American. The MLD will recommend an appropriate disposition of the remains. If a Native American monitor is on-site at the time of the discovery and that person has been designated the MLD by the NAHC, the monitor will make the recommendation of the appropriate disposition.

GEOLOGY AND SOILS

MITIGATION MEASURES GEO-1

- Trails shall be constructed such that rainfall runoff is not concentrated in one direction, resulting in potential erosion.
- During the construction process, temporary erosion control methods will be used to protect disturbed soils. These include, but are not limited to the following:
- Erect silt fencing, as necessary, to prevent excavated soils from entering drainages and spilling down nearby bluffs.
- Compact all fill materials to stabilize surfaces.
- Cover exposed areas of earth with native mulch.
- Any stockpiled soils shall be covered in the event of rainfall to prevent runoff.
- Rehabilitated sections of existing trails shall be restored to natural contours.
- California State Park trail construction supervisors will monitor trail surfaces for damage or deterioration. Department approved repair and maintenance standards will be employed to correct problems and adjust trail drainage patterns for optimum trail and resource protection.

HAZARDS AND HAZARDOUS MATERIALS

MITIGATION MEASURES HAZMAT-1

- All equipment will be inspected for leaks immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from the project site.

- A designated staging area will be identified where equipment refueling may occur. A spill kit will be maintained on-site throughout the duration of the project.
- Equipment will be cleaned and repaired (excepting emergency repairs) in the maintenance shop, away from the project site. Any contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries at a lawfully permitted or authorized destination.
- When power equipment is being used in construction, the public will be temporarily routed away from the subject location.

MITIGATION MEASURES HAZMAT-2

- Spark arrestors will be required for all motorized equipment.
- Construction crews will be required to park vehicles away from flammable material such as dry grasses and brush.
- Park staff will be required to have a State Park radio on site, which allows direct contact to a centralized dispatch or Sonoma County Fire Department. Fire suppression equipment is available on park grounds.

HYDROLOGY AND WATER QUALITY

- No mitigation measures are proposed because there will be no impacts to hydrology and water quality as a result of the project.

LAND USE AND PLANNING

- No mitigation measures are proposed because there will be no impacts to land use and planning as a result of the project.

MINERAL RESOURCES

- No mitigation measures are proposed because there will be no impacts to mineral resources as a result of the project.

NOISE

MITIGATION MEASURES NOISE-1

- Construction activities would be limited to daylight hours and a Monday through Friday work week.
- Motorized equipment used on the project site would be equipped with a muffler of a type recommend by the manufacturer.

POPULATION AND HOUSING

- No mitigation measures are proposed because there will be no impacts to population and housing as a result of the project.

PUBLIC SERVICES

MITIGATION MEASURES HAZMAT-2

- Spark arrestors will be required for all motorized equipment.
- Construction crews will be required to park vehicles away from flammable material such as dry grasses and brush.

- Park staff will be required to have a State Park radio on site, which allows direct contact to a centralized dispatch or Sonoma County Fire Department. Fire suppression equipment is available on park grounds.

RECREATION

- No mitigation measures are proposed because there will be no impacts to recreation as a result of the project.

TRANSPORTATION/TRAFFIC

MITIGATION MEASURES TRANS-1

- The appropriate pedestrian crossing signs will be posted in accordance to the State Parks Standards and guidelines set by CalTrans for the type of intersection in question.

UTILITIES AND SERVICE SYSTEMS

- No mitigation measures are proposed because there will be no impacts to utilities and service systems as a result of the project.

CHAPTER 6

REFERENCES

Aesthetics

Sonoma Coast State Beach General Plan and EIR, proposed draft, April 2006, pgs 2-79 to 2-81

Air Quality

California Air Resources Board, March 28, 2006, Website Address: www.arb.ca.gov

Biological Resources

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Burridge, B. 1995. Sonoma County Breeding Bird Atlas: detailed maps and accounts for our nesting birds, Madrone Audubon Society, Inc., Santa Rosa, California.

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Connors, Dr. Peter. 1994. Vascular Plants of Bodega Head and Bodega Dunes. (unpublished list of plant species compiled by Dr. Connors, Former Reserve Manager, Bodega Marine Laboratory) and personal communication.

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Cultural Resources

Sonoma Coast State Beach General Plan and EIR, proposed draft, April 2006, pgs 2-69 to 2-79

Geology and Soils

Sonoma Coast State Beach General Plan and EIR, proposed draft, April 2006, pgs 2-14 to 2-18

FEMA, ESRI; Online Hazard Maps, Bodega Head Area, Website address: www.esri.com/hazards

Land Use and Planning

Sonoma County Local Coastal Plan, Sonoma County, January 1981; as certified by the State Coastal Commission, December 1980

Recreation

California Department of Parks and Recreation, Visitor Use Statistics – Sonoma Coast State Beach 2004 – 2005, Russian River District Office March 2006

Transportation/Traffic

California Department of Transportation (CalTrans), retrieved March 27, 2006. Website Address: <http://www.dot.ca.gov>.

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APPENDIX A

MAPS, TABLES, AND CHARTS

APPENDIX B

PROJECT DESIGN GRAPHICS

APPENDIX C

SENSITIVE SPECIES LIST

CNDDB RECORD SEARCH

APPENDIX D

MITIGATION MONITORING AND REPORTING PLAN
